

**FINDING OF NO SIGNIFICANT IMPACT
AND DECISION RECORD
EA-NM-510-06-25**

DECISION: It is my decision to authorize the Sundry Notices And Reports On Wells, for the Beacon “BDB” Federal #1 gas well new access road route, submitted by Yates Petroleum Corporation. The provisions for the approval of the APD will include the attachment of the Roswell Field Office requirements as defined in the following exhibits; **Exhibit A** - Location Map, **Exhibit B** - Permanent Resource Road Requirements, and any special mitigating measures developed in the environmental assessment.

In the event the well is abandoned, I recommend that access road reclamation requirements be attached to the well abandonment, including additional requirements imperative for the complete reclamation of the disturbed areas. This action is subject to 43 CFR 3160 regulations for Onshore Oil and Gas operations on federal lease NM-105201.

Authority for these actions is the Mineral Leasing Act of February 25, 1920, as amended.

These actions will affect public land described as:

New Mexico Principal Meridian

ACCESS ROAD -Section 26; NE¹/₄NE¹/₄SE¹/₄, T. 11 S., R. 26 E

FINDING OF NO SIGNIFICANT IMPACT: Based on the analysis of potential environmental impacts contained in the attached environmental assessment, I have determined that impacts resulting from the proposed actions are not expected to be significant and an environmental impact statement is not required.

RATIONALE FOR DECISION: The proposed actions would not result in any undue or unnecessary environmental degradation. Portions of the subject land and adjacent land have been used for similar purposes and all present and potential uses and users have been considered.

COMPLIANCE AND MONITORING: The construction phase of the proposed actions and subsequent operational phases will be monitored as per regulations.

/s/Larry D. Bray

4/7/06

**Larry D. Bray, Assistant Field Manager,
Lands and Minerals**

Date

ENVIRONMENTAL ASSESSMENT

EA# NM-510-06-25

**WELL NAME & NO.: Beacon “BDB” Federal #1-New Access Road Route
BLM Serial #: NM-105201**

Section 26, T. 11 S., R. 26 E., NMPM,
1980' FSL & 660' FEL, Unit Letter I

Chaves County, New Mexico

OPERATOR: Yates Petroleum Corporation

ACTION: Sundry Notices And reports On Wells

SURFACE/MINERAL ESTATE: Federal Minerals/Private Surface

I. Introduction

A. Need for the Proposed Action:

Yates Petroleum Corporation proposes to reroute an access road for a natural gas well at the location described above. The proposed action is needed to develop the mineral lease.

B. Conformance with Land Use Plan:

Oil and gas lease development is in conformance with the Roswell Approved Resource Management Plan and Record of Decision, October 1997.

C. Relationship to Statutes, Regulations, or other Plans:

The proposed action does not conflict with any known State or local planning, ordinance or zoning.

II. Proposed Action and Alternatives

A. Background of the proposed action:

A Sundry Notices And Reports On Wells was submitted on 9/22/05 to reroute the access road that would access the well. This well was previously approved on 9/7/05.

B. Proposed Action:

Yates Petroleum Corporation resubmitted an Application for Permit to Drill on 8/2/05. Yates Petroleum Corporation originally submitted Notice of Staking on 6/30/03, to drill the Beacon “BDB” Federal #1 gas well. The original Application for Permit to Drill was submitted on 7/15/03.

The proposed action would include:

1. The proposed road is approximately 9,100 feet in length, beginning from the State Road 409 to the proposed well pad. Of the 9,100 feet, approximately 8,550 feet is existing road and 550 feet is new access road construction, and about 1300 feet of road would cross public land. The road would have a driving surface (travelway) of 14 feet, with a maximum 30-foot wide surface disturbance area for the road construction. The proposed access road would be constructed and maintained in accordance with the New Mexico Road Policy. There is a Right-of-Way NM-110304, in place for the access.

The construction of approximately 550 feet of new access road would begin from an existing road and would access the northeast corner of the proposed well pad. All other existing access roads would be maintained in as good or better condition than was existing at the commencement of operations. A locked gate on private surface would be crossed and the combination is 4202.

3. Surfacing material (caliche/gravel) needed for the construction of the access road could be obtained by the operator from a private source.

B. Alternatives:

1. Relocate the Proposed Action:

The new access road reroute was determined by the private surface landowner. No other alternative location would have significantly fewer impacts than, or have a clear advantage over, the projected road location. Therefore, the alternative of changing the new access road reroute involved in this action is not analyzed further in this EA.

2. No Action:

Under this alternative, the Sundry Notice And Reports On Wells would be rejected. None of the environmental impacts associated with the proposed action or alternate road location would occur. Additionally, economic benefits of the proposed action would not be realized, and the existing environment, including the developments in place, would remain unchanged.

III. Description of the Affected Environment

A. General Setting:

The proposed new access road reroute is located on federal minerals and private surface about 20 miles east of Roswell, N.M. Historical and present use of the land has been limited to livestock grazing and energy development.

B. Rights of Record:

An inspection of the Master Title Plats and other Bureau records revealed the following title information pertaining to valid existing prior rights on the subject land:

- Oil and gas leases: NM-105201 - covers lease actions.
- No federally administered rights-of-way would be affected in the project area.
- No mining claims are recorded within Sec. 26, T. 11 S., R. 26 E., NMPM.

C. Affected Resources:

The following critical resources have been evaluated and are either not present or are not affected by the proposed action or the alternatives in this EA:

Areas of Critical Environmental Concern (ACEC's)
Cultural Resources (06-R-064-A&B)
Farmlands, Prime/Unique
Floodplains
Native American Religious Concerns
Wastes, Hazardous/Solid
Wetlands and Riparian Zones
Wild & Scenic Rivers
Wilderness

1. Air Quality:

The area of the proposed action is considered a Class II air quality area. A Class II area allows moderate amounts air quality degradation. The primary sources of air pollution are dust from blowing wind on disturbed or exposed soils and exhaust emissions from motorized equipment.

2. Soil:

The *Soil Survey of Chaves County, New Mexico, Southern Part (USDA Soil Conservation Services 1980)* was used to describe and analyze impacts to soils from the proposed action. The soil map units represented in the project are:

Holloman-Gypsum land complex, 3 to 5 percent slopes (HrC) Runoff of the Holloman unit soil is medium and the hazard of water erosion and soil blowing are moderate.

3. Vegetation: MIXED DESERT SHRUB

This lease is within the mixed desert shrub vegetative community as identified in the Roswell Resource Management Plan/Environmental Impact Statement (RMP/EIS). Appendix 11 of the Draft RMP/EIS describes the Desired Plant Community (DPC) concept and identifies the components of each community. The mixed desert shrub community is primarily made up of desert grasses, shrubs and cacti. The predominant shrub species include creosote (*Larrea tridentata*), mesquite (*Prosopis glandulosa*), tarbush (*Flourensia cernua*), four-wing saltbush (*Artiplex canescens*), little leaf sumac (*Rhus microphylla*), sage (*Artemisia* spp.), snakeweed (*Gutierrezia sarothrae*), agave (*Agaves* pp), and ephedra (*Ephedra* spp.). Common cacti encountered are claret cup (*Echinocereus triglochidiatus*), cholla (*Opuntia imbricata*), prickly pear (*Opuntia engelmannii*), and eagle claw (*Echinocactus horizonthalonius*). Forbs include plantain (*Plantago* spp.), croton (*Croton* spp.), globemallow (*Sphaeralcea* spp.), and buckwheat (*Eriogonum* spp.). Grasses include fluffgrass (*Dasyochloa pulchella*), sideoats grama (*Bouteloua curtipendula*), ring muhly (*Muhlenbergia torreyi*), black grama (*Bouteloua eriopoda*), sand dropseed (*Sporobolus cryptandrus*), tobosa (*Pleuraphis mutica*), burrograss (*Scleropogon brevifolius*) and threeawn (*Aristida* spp.).

The Ecological Site Description for the proposed access road reroute is [Loamy SD-3 Southern Desertic Basins, Plains and Mountains].

4. Invasive & Noxious Weeds:

There are no known populations of invasive or noxious weed species on the proposed access road reroute.

Infestations of noxious weeds can have a disastrous impact on biodiversity and natural ecosystems. Noxious weeds affect native plant species by out-competing native vegetation for light, water and soil nutrients. Noxious weeds cause estimated losses to producers \$2 to \$3 billion annually. These losses are attributed to: (1) Decreased quality of agricultural products due to high levels of competition from noxious weeds; (2) decreased quantity of agricultural products due to noxious weed infestations; and (3) costs to control and/or prevent the noxious weeds.

Further, noxious weeds can negatively affect livestock and dairy producers by making forage either unpalatable or toxic to livestock, thus decreasing livestock productivity and potentially increasing producers = feed costs and animal health care costs. Increased costs to operators are eventually borne by consumers.

Noxious weeds also affect recreational uses, and reduce realty values of both the directly influenced properties and adjacent properties.

Recent federal legislation has been enacted requiring state and county agencies to implement noxious weed control programs. Monies would be made available for these activities from the federal government, generated from the federal tax base. Therefore, all citizens and tax payers of the United States are directly affected when noxious weed control prevention is not exercised.

5. Ground Water Quality :

Fresh water for irrigation and stock use is obtained from Quaternary Alluvium and Artesia Group. There are several citations of water in the 500 to 680 ft. range. In the adjacent townships, both north and south, useable water is cited deeper than 1000 ft. on the west edge.

6. Wildlife:

Wildlife species utilizing this area for habitat include mule deer, pronghorn, coyote, fox, rabbits, kangaroo rats, pocket gophers, herptile species, as well as a variety of songbirds, dove, quail, and raptors.

No known special status species (plant/animal) or critical habitat is present within the confines of the new access road reroute.

7. Range: The access road is located on a BLM grazing allotment #65062, permitted to Stonebridge Ranch LLC, P.O. Box 9065, Greensboro, NC 27429.

8. Visual Resources:

The setting presents a year-around reddish setting due to exposed landform and soil colors.

The proposed actions are located within a designated VRM Class IV area. The setting presents a winter gray setting and in warm months, with foliage, a gray to gray-green color pattern.

9. Recreation:

The proposed action is on private surface and federal minerals. Recreation and public use on this area is at the discretion of the private land owner.

10. Cave/Karst:

While the proposed action is located in the *High Potential Karst Area*, no surface cave/karst features were observed in the immediate vicinity of the proposed actions.

11. Minority or Low-income Populations or Communities:

The proposed actions would not affect the minority or low-income populations or communities.

IV. ENVIRONMENTAL IMPACTS

A. Proposed Action Impacts:

The surface disturbance involved in the construction of the access road reroute would total about 0.4 acre of federal minerals/private surface.

1. Air Quality:

Air quality would temporary be impacted with pollution from exhaust emissions, chemical odors, and dust that would be caused by the motorized equipment used to construct the new access road. Dust dissemination would discontinue upon completion of the construction phase of the new access road. Air pollution from the motorized equipment would discontinue at the completion of the road construction phase of the operations. The winds that frequent the southeastern part of New Mexico generally disperse the odors and emissions. The impacts to air quality would be greatly reduced as the construction of the new access road is completed.

2. Soil:

The construction of the new access road would physically disturb about 0.4 acre of topsoil and would expose the substratum soil. The exposed soil would be susceptible to wind blowing and water erosion. Surfacing the exposed soil on the new access road would minimize these impacts. The impact to the soil would be remedied upon reclamation of the access road and vegetation re-establishes.

Additional soil impacts associated with lease development would occur when heavy precipitation causes water erosion damage. When water saturated segment(s) on the access road become impassable, vehicles may still be driven over the new access road. Consequently, deep tire ruts would develop. Where impassable segments are created from deep rutting, unauthorized drive-arounds may occur outside the designated travelway of the access road. Road constructions requirements and regular maintenance would alleviate potential impacts to the access road from water erosion damage.

3. Vegetation:

The construction of the access road would remove about 0.4 acre of native vegetation. If it is a producing well, reclamation of the access road would not commence until the well is a depleted producer and plugged and abandoned. Vegetation recovery on the access road would depend on the life of the well. If drilled as a dry hole and plugged, reclamation of the access road would immediately follow. Vegetation

impacts would be short-term when the access road within a few years, and the reclamation of the access road is successful.

4. Invasive & Noxious Weeds:

The construction of a new access road may unintentionally contribute to the establishment and spread of noxious weeds. Noxious weed seed could be carried to and from the project areas by construction equipment, and transport vehicles. The main mechanism for seed dispersion on the road is by equipment and vehicles that were previously used and or driven across or through noxious weed infested areas. The potential for the dissemination of invasive and noxious weed seed may be elevated by the use of construction equipment typically contracted out to companies that may be from other geographic areas in the region. Washing and decontaminating the equipment prior to transporting onto and exiting the construction areas would minimize this impact.

Impacts by noxious weeds will be minimized due to requirements for the company to eradicate the weeds upon discovery. Multiple applications may be required to effectively control the identified populations.

5. Ground Water Quality:

The construction of the access road would not contribute to groundwater contamination.

6. Wildlife:

Some small wildlife species may be killed and their dens or nests destroyed during construction of the access road. The construction of the access road could cause fragmentation of wildlife habitat. The short-term negative impact to wildlife would occur during the construction phase of the operation due to noise and habitat destruction. In general, most wildlife species would become habituated to the new road. For other wildlife species with a low tolerance to activities, wildlife that is displaced from the area due to ongoing disturbances such as vehicle traffic and equipment maintenance could occur. Upon abandonment of the well, the road areas that are reclaimed would revegetate and wildlife would return to previous levels.

7. Range:

There would be some minor disruption of livestock grazing in the pasture, during the construction of the access road. Vehicle traffic would increase in the area, which may lead to conflicts with livestock.

8. Visual Resources: [VRM Class IV]

The construction of an access road would slightly modify the existing area visual resources. The proposed action is located in an area designated VRM Class IV.

The objective of Class IV is to: "Provide for management activities which require major modification of the existing landscape character...Every attempt, however, should be made to reduce or eliminate activity impacts through careful location, minimal disturbance, and repeating the basic landscape elements."

9. Recreation:

Oil and gas activities would have little or no effect on the recreational opportunities, since the recreating public has no legal or physical access to this parcel of private land. Recreation opportunities that could occur in this area are limited or non-existent due to land patterns.

10. Cave/Karst:

While the proposed action is located in the *High Potential Karst Area*, no surface cave/karst features were observed in the immediate vicinity of the proposed action.

11. Minority or Low-income Populations or Communities:

The proposed action would not impact the minority or low-income populations or communities.

B. Alternatives:

1. Relocation Alternative:

The alternative of changing the road reroute involved in this action was not analyzed further because no other alternative road location would have significantly fewer impacts than, or has a clear advantage over, the proposed road reroute.

2. No Action Alternative:

The no action alternative would constitute denial of the Sundry Notices And Reports On Wells. This alternative would have no consequential results from the identified environmental impacts. There would, however, be an adverse economic impact to the applicant through the denial of the lessee's right to develop the mineral reserves or through increased costs of accessing those mineral reserves through other means. There have been no significant or unmitigatable impacts identified as a result of this analysis, which would warrant selection of the no action alternative.

C. Mitigation:

The Roswell Field Office; Well Location Map (Exhibit A) and Permanent Resource Road Requirements (Exhibit B) and the special requirements derived from this EA, would be applied to this proposed action to minimize the surface disturbance and conserve the surrounding landscape.

D. Cumulative Impacts:

While it is likely that there will be no significant cumulative impact from the proposed action, continued oil and gas development, and other surface-disturbing activities in this area, may potentially have negative cumulative impacts on vegetation, soil, water, livestock, wildlife, and visual resources.

V. Consultation and Coordination

An onsite inspection was conducted on the access road on 10/19/05. In attendance was Mrs. Debbie L. Caffall, Regulatory Agent for Yates Petroleum Corporation, and Richard Hill, Environmental Protection Specialist, BLM Roswell Field Office. Coordination and consultation has occurred with the applicant's agent. The comments and suggestions expressed during the onsite consultation have been incorporated into this EA.

Coordination and consultation has occurred with Roswell Field Office's Staff. The comments and suggestions expressed during the analytical review of the proposed action have been incorporated into

this Environmental Assessment. Roswell Field Office’s Staff at on-site; Michael McGee and Joseph Navarro.

Reviewed by:

Irene Gonzales, Realty Specialist

Date

EXHIBIT B

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PERMANENT RESOURCE ROAD REQUIREMENTS New Access Road Route

Operator: Yates Petroleum Corporation
BLM Serial Number: NM-105201
Well Name & No.: Beacon "BDB" Federal #1
Location: Section 26, T. 11 S., R. 26 E.
1980' FSL & 660' FEL, Chaves County, N.M.

The holder agrees to comply with the following requirements:

1. GENERAL REQUIREMENTS:

- A. The **operator** shall hereafter be identified as the **holder** in these requirements. The Authorized Officer is the person who approves the Permanent Resource Road Requirements.
- B. The holder shall minimize any disturbance to structures on public domain surface. Damages caused to any structure during road construction operations shall be promptly repaired by the holder. Functional use of any structure shall be maintained at all times. The holder shall make a documented good-faith effort to contact the owner prior to disturbing any structure.
- C. When necessary to pass through an existing fence line, the fence shall be braced on both sides of the passageway prior to cutting and the fence shall be promptly repaired to at least it's former state or to a higher standard than it was previously constructed.
- D. A professional engineer shall design the access road if the road grade exceeds 10 percent slope.

2. INGRESS AND EGRESS:

The access road shall be constructed to access the well pad on the **Northeast** corner of the well pad to comply with the planned access road route.

3. ROAD TRAVELWAY WIDTH:

The travelway of the road shall be constructed 14 feet wide. The maximum width of surface disturbance shall not exceed 30 feet of road construction. The specified travelway width is 14 feet for all road travelway surfaces unless the Authorized Officer approves a different width.

4. SURFACING:

A. Beginning from the dedicated road (county road and/or state highway) all access roads on federal surface and the entire length of the new access road travelway shall be surfaced prior to drilling operations.

B. **The access road travelway shall be surfaced** with caliche or gravel material. If other surfacing material is used, the new type of material shall be approved by the Authorized Officer. The travelway of the road shall be surfaced with **caliche** material. The caliche material shall be compacted to a minimum thickness of **6** inches for the entire length of the travelway surface on the access road. The width of surfacing shall not be less than 14 feet of travelway surface. Prior to using any mineral materials from an existing federal pit, authorization must first be obtained from the Authorized Officer.

5. CROWNING AND DITCHING:

Crowning with materials on site and ditching on one side of the road, on the uphill side, shall be required. The road cross section shall conform to the cross section diagrams in Figure 1 (attached page 6). Where conditions dictate, ditching shall be required on both sides of the road. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road).

6. DRAINAGE:

A. Drainage control shall be ensured over the entire road through the construction of ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings.

B. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %): **PERCENT SLOPE AND SPACING INTERVALS FOR LEAD-OFF DITCHES:**

Percent slope	Spacing interval
0 - 4%	150' - 350'
4 - 6%	125' - 250'
6 - 8%	100' - 200'
8 - 10%	75' - 150'

CROSS SECTION OF TYPICAL LEAD-OFF DITCH

1' MINIMUM DEPTH

BERM

NATURAL GROUND SURFACE

PERMANENT RESOURCE ROAD REQUIREMENTS

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C. A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

D. On road slopes exceeding 2%, water flow shall drain water into an adjacent lead-off ditch. Water flow drainage location and spacing shall be determined by the following formula:

FORMULA FOR SPACING INTERVAL OF LEAD-OFF DITCHES:

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

Ex. 4% slope: spacing interval = $\frac{400}{4} + 100 = 200$ feet

7. CULVERT INSTALLATION: **No culverts are required on this road.**

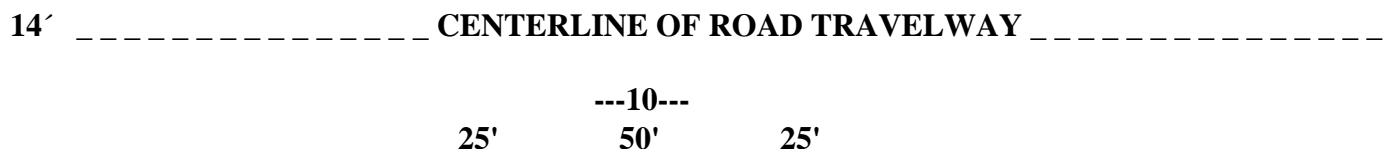
ONE (1) CULVERT SHALL BE INSTALLED AT THE DEEP WATERWAY CHANNEL FLOW CROSSING IN THE XX¼XX¼ OF SECTION - T. S. - R. E. (SEE EXHIBIT A - LOCATION MAP).

Culvert pipes shall be used where ravines, arroyo gullies, and deep waterway channel flows are crossed by the access road construction route. The culvert(s) shall not be less than XX inches in diameter (minimum 18 inch culvert). The location for the culvert installation is designated on the attached map - **EXHIBIT A**. (A culvert pipe installation diagram shall be attached to this requirement when a culvert is required to be installed, see EXHIBIT - X).

8. TURNOUTS:

Vehicle turnouts shall be constructed on all single lane roads (unless the Authorized Officer determines that the turnouts are not required). Turnouts shall be intervisible and shall be constructed on all blind curves with additional turnouts as needed to keep spacing below 1000 feet. Turnouts shall conform to the following diagram:

STANDARD TURNOUT - PLAN VIEW



9. CATTLEGUARDS: **NONE REQUIRED**

A. **ONE (1) CATTLEGUARD SHALL BE INSTALLED AT THE FENCE CROSSING IN THE XX¼XX¼ OF SECTION - T. S. - R. E. (SEE EXHIBIT A - LOCATION MAP).**

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B. A cattleguard installation diagram shall be attached to this stipulation when a cattleguard is required to be installed - see EXHIBIT X - DIAGRAM A & B).

C. The existing cattleguard(s) on the access road shall be replaced if they are damaged from heavy vehicular traffic use and the Authorized Officer determines that a new cattleguard shall be installed where the existing in place cattleguard(s) have deteriorated beyond practical use. The holder shall be held responsible for the condition of the existing in place cattleguard(s) that are utilized for vehicular traffic use on lease operations by the holder.

D. Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads, (exceeding H-20 loading,) are anticipated. (See BLM standard drawings for cattleguards – Exhibit X – Diagram A & B). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

10. MAINTENANCE:

A. The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, cattleguard maintenance, surfacing, and weed control.

B. The holder shall cooperate with other authorized users in maintenance of the road(s). Failure of the holder to share maintenance costs in dollars, equipment, materials, and manpower proportionate to the holders use with other authorized users may be adequate grounds to terminate the road use. The determination as to whether maintenance expenditures have been withheld by the holder and the decision to terminate the road use shall be at the discretion of the Authorized Officer. Upon request, the Authorized Officer shall be provided with copies of any maintenance agreements entered into by the holder.

11. PUBLIC ACCESS:

A. Public access on this road shall not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public land shall not be locked or closed to public use unless closure is absolutely necessary and is authorized in writing by the Authorized Officer.

12. ROAD REHABILITATION REQUIREMENTS:

A. On private estate land the restoration procedures on the reclamation of the access road shall be accomplished in accordance with the Private Surface Land Owner concurrence. If the surface land owner does not retain the access road for his ranch operations, upon abandonment of this well, the surface material (caliche shall be removed from the access road. The removal of the surface material on the road could be re-used for maintenance of other federal roads within close proximity of the reclaimed area or properly disposed of in a federal mineral material pit.

13. SEEDING REQUIREMENTS:

A. The stockpile of topsoil shall be spread over the well pad to cultivate a seed bed. The holder shall not contaminate the topsoil stockpile with the reserve pit muds and/or cuttings.

B. The reclaimed area(s) shall be seeded with the seed mixture that was determined by the Roswell Field Office for the Desired Plant Community on this well site.

C. The same seed mixture shall be used for the reclamation of the access road and well pad.

D. The planting of the seed shall be done in accordance with the following seeding requirements:

1. The topsoil soil shall be plowed under with soil turning equipment and the plowed surface shall be disked before seeding. Seed shall be planted using a drill equipped planter with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture shall be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds have a tendency to drop to the bottom of the drill and are planted first; the holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed shall be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre noted below are to be doubled.

2. The holder shall seed all the disturbed areas with the DPC seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed per acre, (Pounds of pure live seed per acre: pounds of seed X percent purity X percent germination = pounds pure live seed). There shall be no primary or secondary noxious weeds in the seed mixture.

In accordance with State law(s) the seed should be tested for purity and viability within nine (9) months prior to sell. Commercial seed shall be either certified or registered seed. The seed mixture container shall be tagged in accordance with State law(s) and the certified seed tag shall be made available for inspection by the Authorized Officer.

3. **Desired Plant Community** seed mixture to be planted in pounds of pure live seed per acre:

<u>Loamy SD-3 Ecological Site</u>		
<u>Common Name and Preferred Variety</u>	<u>Scientific Name</u>	<u>Pounds of Pure Live Seed Per Acre</u>
Blue grama, var. Lovington	(<i>Bouteloua gracilis</i>)	4.00 Lbs.
Sideoats grama, Var. Vaughn or El Reno	(<i>Bouteloua curtipendula</i>)	1.00 Lb.
Sand dropseed	(<i>Sporobolus cryptandrus</i>)	0.50 Lb.
Vine mesquite	(<i>Panicum obtusum</i>)	1.00 Lb.
Plains bristlegrass	(<i>Setaria vulpesita</i>)	1.00 Lb.
Indian blanketflower	(<i>Gaillardia aristata</i>)	0.50 Lb.
Desert or Scarlet Globemallow	(<i>Sphaeralcea ambigua</i>) or (<i>S. coccinea</i>)	1.00 Lb.
Total Pounds Pure Live Seed Per Acre		9.00 Lbs.

4. If one species is not available, increase ALL others proportionately. The seed mixture shall be certified weed free seed. A minimum of 4 species is required, including 1 forb species.

E. The recommended time to seed is from June 15th through September 15th. The optimum seeding time is in mid-July. Successive seeding should be done either late in the fall (Sept. 15th - Nov. 15th, before freeze up) or early as possible the following spring to take advantage of available ground moisture. However, the holder may seed immediately after completing surface abandonment requirements.

F. The seeding of the disturbed areas shall be repeated until a vegetative thicket is established on the access road and well pad. The Authorized Officer shall make the determination when the regrowth on the disturbed areas is satisfactory.

G. The holder shall be responsible for the establishment of vegetation on the access road and well pad. Evaluation of vegetative growth will not be made before the completion of the first growing season after seeding. The Authorized Officer reserves the right to require reseeding at a specific time if seed does not germinate after one growing season. Waiver of this requirement would be considered if diligent attempts to revegetate the disturbed areas have failed and the Authorized Officer determines that further attempts to replant the access road and well pad are futile.

H. Contact Mr. Randy Legler at (505) 627-0215 to witness the seeding operations, two (2) days prior to seeding the disturbed areas.

I. Invasive and Noxious Weeds Requirement:

1. The holder shall be held responsible if noxious weeds become established within the reclaimed areas. Evaluation of the growth of noxious weeds shall be made upon discovery. Weed control will be required on the disturbed land where noxious weeds exist, which includes the road, pad, associated pipeline corridor/routes, and adjacent land affected by the establishment of weeds due to this action. The holder is responsible for consultation with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policy.

2. The holder shall insure that the equipment and or vehicles that will be used to reclaim the access roads and well pad are not polluted with invasive and noxious weed seed. Transporting of invasive and noxious weed seed could occur if the equipment and vehicles were previously used in noxious weed infested areas. In order to prevent the spread of noxious weeds, the Authorized Officer shall require that the equipment and vehicles be cleaned with either high pressure water or air prior to reclamation of the access roads and well pad.

14. **SPECIAL REQUIREMENT(S):**

A. Precautionary measures shall be taken by the holder during construction of the access road to protect the existing **gas** pipeline(s) that parallel the access road (**See map - EXHIBIT B**). The holder shall be held responsible for any damage to the existing **gas** pipelines. If the **gas** pipelines are ruptured and/or damaged the holder shall immediately cease construction operations and repair the pipeline(s). The holder shall be held liable for any unsafe construction operations that threaten human life and/or cause the destruction of equipment.